



Triumph Thunderbird: it's what cruiser riders have been waiting for

The most evocative name in Triumph history is back! Originally used on Triumph's high-performance 6T model of 1951, this all-new 1,597cc cruiser is arguably the most appropriate model to wear the famous Thunderbird name and logo.

Conceived as a result of customer demand for a cruiser to fill the gap between the 865cc America and Speedmaster, and the awesome Rocket III family, the Thunderbird is a thoroughly modern parallel-twin with the high-quality dynamics expected from Triumph.

At the heart and soul of Thunderbird is the world's largest production parallel-twin motor. The torque-laden 'T-16' motor features a bore and stroke of 103.8 x 94.3mm and eschews the hackneyed V-twin engine, bringing Triumph's traditional layout to the large capacity cruiser market for the first time.

Triumph's development team spent a considerable amount of time benchmarking competitor machines to ensure that the Thunderbird demonstrates strong performance in all areas. As standard, the Thunderbird delivers 146.1Nm of torque and 85bhp – more than enough to keep the Thunderbird ahead of its competitors. However, riders looking for that bit extra performance can opt for the official, dealer fitted, big-bore kit. The fully road-legal kit includes larger pistons, liners and revised camshafts to take peak power to 97bhp (when fitted with standard exhausts), with torque rising to a tree-stump pulling 156Nm.

Triumph drew on the experience gained from developing the 865cc parallel-twins and the 2,294cc Rocket III engines, when developing the new unit, with most of the design team coming from these projects. The team employed the same care and expertise used in the class-leading Daytona 675 supersport machine, ensuring a throughout modern and efficient powerplant for the new machine.

The double overhead camshaft engine features four valves and twin spark plugs per cylinder and, to aid starting, the exhaust camshaft is equipped with a decompression system.

A 270° crankshaft was chosen to deliver the aural experience expected by cruiser riders, with the bike delivering a satisfying thump through its classically styled twin exhaust pipes. The sound and feel of the T-16 unit was paramount in the design brief and despite having two 800cc pistons thudding up and down inside the bores, the engine delivers its power in a refined manner thanks to twin balancer shafts, which are situated in front of, and behind, the cylinders, as well as a torque compensator fitted to the end of the crankshaft.

The team worked on eliminating high pitched mechanical sounds and embracing the low bellows that characterize a big capacity twin, with the silencers being designed to let as much low frequency 'boom' through as is possible under the emissions regulations. Helically cut gears, from second to sixth, reduce lash and mechanical noise and the net result is a motor that is smooth but with a pleasant low-down power delivery and engine tone that makes the rider feel connected to the motorcycle.

Controlling noise and gas emissions is critical in any modern engine design, so liquid-cooling was an automatic choice for the new engine. Fuel is delivered through twin 42mm diameter throttle bodies and the intelligent electronic fuel injection system, similar to that employed on the Daytona 675, reacts to the rider input to give the Thunderbird automatic 'sport' and 'cruise' modes.

Gentle application of the throttle results in an equally soft and smooth power delivery, while the ECU recognizes rapid openings and subsequently delivers maximum available punch. Each cylinder has its own oxygen sensor and runs a separate fuel injection map, with the intelligent closed-loop electronic fuel injection 'learning' how the engine is running and constantly adapting to ensure the motor runs as smooth and efficiently as possible. Catalytic converters ensure that the Thunderbird complies with all the latest emissions regulations.

Despite having massive torque that keeps gear shifting to a minimum, the Thunderbird has been equipped with a refined six-speed gearbox to give a lazy overdrive for optimum fuel consumption on laidback cruises. Thunderbird is the first belt driven Triumph of the Hinckley era and indeed the marque's first since the mid-1920s, when motorcycles using rudimentary leather belts were phased out, and this latest machine's system has been designed for excellent durability thanks to a tungsten carbide treatment on the rear pulley.

As well as delivering class leading performance, the T-16 engine has been designed to look as good as it sounds. The cam chain is driven by an idler gear, allowing the camshaft sprockets to be smaller and ensuring that the cylinder head remains in perfect proportion to the bottom end.

Ensuring a clean design with minimal cabling and pipework on show was key from the very beginning of the project. The design team wanted the engine to be flaunted loud and proud, without resorting to covers to hide some of the less aesthetically pleasing parts. The Thunderbird's throttle bodies have been designed to be integrated with the engine and are proudly on display, while the water pump and associated plumbing have been neatly located inside the engine.

Completing the look are highly chromed clutch and generator covers, while the stylishly traditional twin chromed exhausts have double skinned headers to avoid discoloration through prolonged use.

Chassis

Triumph prides itself on building motorcycles with exceptional handling characteristics, so it is no surprise that the Thunderbird has been endowed with class leading dynamics.

Cruisers are traditionally not renowned for their dynamic prowess but Triumph was determined to ensure that the Thunderbird has the handling capability to be ridden enthusiastically.

Thunderbird's T-16 engine has been used as a stressed member and the chassis development team set extremely high targets for strength and stiffness to ensure that the new bike delivers the riding experience expected from a modern Triumph.

Keeping the Thunderbird composed is finely calibrated suspension front and rear, which has been developed in conjunction with Showa. Chunky 47mm front forks with 120mm of travel adorn the front of the Thunderbird, while the chromed twin shocks have five preload settings to cater for everything from solo riding and to two-up touring.

To maximise the handling of their new bike, Triumph's design team worked in conjunction with Metzeler to develop a bespoke tyre for the Thunderbird. A 200-section rear tyre was chosen for both its aggressive look and performance attributes and the German manufacturer has developed a new version of its highly-acclaimed ME880 Marathon tyre specifically for the project.

Cast spoke wheels have been machined to give a polished finish and are shod with 120/70R19 tyres at the front and 200/50R17 at the rear, with the ME880 boasting a specification that wouldn't look out of place on a sportsbike. The tyres feature Metzeler's patented 0° steel belt radial construction, which delivers outstanding stability and ride quality, combined with excellent rider feedback, while the high silica compound reduces rolling resistance and provides increased longevity and grip in wet conditions.

Fittingly for a bike that tells you more about the road, the Thunderbird also tells you more about your journey. Instrumentation has been neatly packaged into the sleek chrome nacelle and features a large speedometer with a small integrated tachometer. Vital information is quite literally at the rider's fingertips on a compact yet easy to read LCD display, which is controlled through a button on the right hand switchgear. The display includes a fuel gauge, two trip meters, a clock and range to empty indicator. This user friendliness is carried over to the turn-signals, which are self-cancelling for even easier operation.

The Thunderbird has been designed to go the distance with a capacious 22 litre fuel tank. With the sophisticated fuel injection system delivering excellent fuel economy, the Thunderbird is approximately 17% more efficient than competitor models in mixed use.

Classic cruising – Triumph style

Triumph drafted in American Tim Prentice's Motonium Design company to style to the Thunderbird. Working to a brief of producing 'a modern cruiser using a Triumph parallel engine' Prentice started work on the project in August 2004 and split his time between Triumph's Hinckley headquarters and his LA studio.

Prentice's brief was to create a modern cruiser based around Triumph's trademark parallel-twin motor. The resulting sketches combine a classic cruiser stance with a 700mm saddle height, among the lowest in the class, and feet forward riding position, with the bold parallel-twin unit proudly on display. The rider seat itself is wide and well padded, with taped seams to avoid water seeping in even during the worst weather conditions. The pillion seat is removable in seconds for solo pilots seeking a stripped down solo look.

As Triumph's design and manufacturing teams transformed the new cruiser from a series of two-dimensional drawings into 3D clay models and ultimately prototype motorcycles, Prentice remained on hand to fine tune the aesthetics of the parts as they went from concept to production representative.

Prentice has produced a clean and modern design, easily identifiable as a cruiser but with a unique Triumph twist. Completing the understated look, Triumph has taken a minimalist approach to branding the Thunderbird. Only small zinc lozenge Triumph badges on the fuel tank, Triumph's trademark triangular insignia on the engine casings and instrument assembly, and a small Thunderbird emblem on the speedometer reveal the bike's identity.

And while the Thunderbird has been designed for plenty of 'go' it hasn't been at the expense of any 'stop'. Twin 310mm discs upfront are grabbed by Nissin four-piston fixed calipers, delivering massive stopping power in a smooth and intuitive manner. A similarly sized rear disc is mated to a two-piston floating caliper manufactured by Brembo. Recognising the growing popularity of anti-lock braking systems around the world, the Thunderbird is the first Triumph cruiser to have the option of ABS.

Delivering a quality product is a mantra at Triumph and the Thunderbird design team has taken great care to ensure that the new cruiser delivers exceptionally high levels of detail and finish. Paintwork and high gloss chrome plating is of the highest quality. In addition to a Jet Black colour option, Pacific Blue with Fusion White and Aluminium Silver with Jet Black, combinations are available.

What's in a name?

Announced in 1949 for the 1950 model year, the original Triumph Thunderbird was a groundbreaking motorcycle that set the standards for 1950s motorcycling.

The 6T Thunderbird was the ultimate sportsbike of the day. Based on the popular 500cc Speed Twin, the capacity was increased to 650cc. With 34bhp, it was the first affordable motorcycle capable of reaching the magic 100mph.

The Thunderbird was unashamedly aimed at driving sales in the US market. Triumph was placing a big emphasis on the market at this time and set up its own subsidiary to service the East Coast in 1951. Legend has it that Edward Turner, General Manager of Triumph at the time, got his inspiration after staying in the Thunderbird Motel on one of his Stateside visits. The name Thunderbird itself comes from native American mythology, the Thunderbird being a large flying creature with supernatural powers that looks after humans.

Although based on the Speed Twin, styling was cutting edge: very sleek with the famous streamlined nacelle-type headlamp. To promote the bike's launch, Triumph had three test riders ride from the factory to the high-speed banked test track at Montlhery, near Paris, where they rode side-by-side and averaged 92mph over 500 miles. The three bikes were ridden back to the factory and then displayed at public shows. Later in the year a more sporting version, known as the Tiger T110, capable of over 110mph was released.

The Thunderbird's legend was cemented when it played a starring role in the 1952 movie, *The Wild One*. Famously ridden by Marlon Brando's character Johnny, it was the coolest bike of the era.

The Thunderbird name was briefly revived in 1981, when the Meriden Cooperative produced a 650cc roadster and trail bike using the same moniker. A custom styled, 600cc, version had been planned for 1984 but never went into production due to the closure of the old factory.

The first Thunderbird of the Hinckley era was announced in 1994 (for the 1995 model year). Again, the model spearheaded Triumph attack on the American market (it coincided with the arrival of Triumph's newly formed North American subsidiary). Based on the same modular frame and three cylinder engine as the rest of the range, the new Thunderbird was a highly-chromed roadster that quickly became one of the best sellers in the range. Two derivatives (the Thunderbird Sport, with less chrome and higher-specification brakes, and the custom styled Adventurer) were also introduced and the model remained part of the range until 2004. These models really introduced the concept of accessories to Triumph's range and even today there is a huge cult following for the bike, which infamously played a lead role alongside Pamela Anderson in the 1996 B movie Barb Wire.

Go Your Own Way with Triumph Accessories

Triumph's brand philosophy is 'Go Your Own Way' and offering customers the chance to personalise the Thunderbird to meet their individual needs was a key factor in the development brief.

More than 100 Genuine Triumph Accessories are available for the new bike, which can be used together to modify the aesthetics, dynamics or performance of the Thunderbird.

Headlining this accessories range is the 1,700cc big bore kit. In addition to the larger pistons and liners, the dealer-fitted kit also comes with bespoke camshafts, clutch springs and an exclusive '104ci' clutch cover which proudly displays the increased capacity for all to see. The big bore kit is fully homologated under Euro 3 emissions regulations and, when combined with the high-performance air filter, accessory silencers and the specially developed fuel injection map, it increases power to a stunning 101PS/100bhp/74kW, with peak torque rising to 165Nm/122ft.lb.

Designer Tim Prentice styled the range of accessories alongside the very first sketches, ensuring complete compatibility and synergy between the standard machine and the complete accessory range.

There are two distinct paths that the Thunderbird can be taken down, to cater to the needs of those customers who want to take the bike down a street rod or touring path.

For those looking for a sporty power cruiser, the headline accessories include a colour-coordinated headlamp cowl, beach-bar style wide handlebars and shorter silencers which, due to their increased noise emissions, are not certified for road use. Included with the silencers is a bespoke tune which has been painstakingly developed by Triumph's in-house calibration team to ensure that the correct air to fuel ratio is achieved on all throttle openings, something that few, if any, aftermarket manufacturers can boast.

Riders looking to go the distance can easily convert their Thunderbird into a fully-dressed 'bagger'. Three quick release screens for the Thunderbird ensure that the bike can be quickly converted from fully dressed tourer to stripped down sportster in seconds, leaving only small attachment bobbins on the fork stanchions. All Triumph accessory screens are coated with Quantum TM, a specially developed clear coat for supreme abrasion resistance and optical clarity. Tests have proven Quantum TM coated screens to be up to 20 times more resistant to scratches than some aftermarket screens. Likewise the optional passenger sissy bars can be removed with equal ease and, like the screen, is lockable to prevent theft.

Of course, no self-respecting bagger can be without its panniers and Triumph's accessories division has developed a set of bespoke saddle bags specifically for the all-new Thunderbird.

Bolting any parts onto any motorcycle can have a considerable effect on the handling and stability, so Triumph never releases any accessories until they have been tested to the same exacting standards as the motorcycles they are designed for. This is never more true than screens and luggage, which can seriously influence the handling of the bike when fully loaded.

The Thunderbird's genuine leather panniers have been tested over thousands of miles in all conditions and have a degree of movement engineered into them to ensure the motorcycle remains stable at all speeds and under all loads.

Completing the classic bagger look are a range of footboards, auxiliary lamps and sumptuous long-haul touring seats, with adjustable items such as the rider backrest, pillion boards and highway pegs offering an opportunity to tailor the Thunderbird exactly to the rider's needs. Riders wishing to add a bit of 'bling' to their Thunderbird are well catered for with an extensive list of hand-polished chrome parts ranging from accessory mirrors, through to fork lowers and complete wheel assemblies.

For a full list of accessories, please refer to www.triumphmotorcycles.com where the Create My Triumph feature can be used to virtually dress a motorcycle with Genuine

Triumph Accessories, generating a price and high-resolution image of the accessorised bike.

Triumph Clothing

Accompanying the release of the Thunderbird is a specially created leisurewear and accessories from Triumph's ever expanding Clothing division.

Two casual men's 100% cotton T-shirts have been designed to capture the style and essence of the Thunderbird. The short sleeve option carries a shield design with the bike's silhouette and flame detailing, while the long-sleeve 'two-into-one' T-shirt includes the distinctive Thunderbird logo on the back and breast, with the Triumph badge proudly emblazoned on the sleeves. A cotton printed patch, drinking mug and baseball cap complete the collection and, like the T-shirts, will be available in Triumph dealerships from June 2009

Triumph has also developed a range of performance motorcycle clothing designed specifically for the cruiser rider. New for 2009 is the highly-specified H2Protec jacket and matching jeans, which can be zipped together. Designed to be as much at home in snowy Sweden as it is in the Arizona desert, this top-of-the-range jacket is constructed from 1-1.2mm leather and comes with easily removable CE certified shoulder and elbow protectors for excellent protection. However, it is the range of comfort features that make this jacket stand out from the crowd.

A TFL heat reflective coating and hidden ventilation panels keep the wearer cool in hot weather, while the jacket's removable inner thermal liner, water and windproofing cater for cooler conditions. A generous comfort fit has been designed with cruiser ergonomics in mind, while the classic black look is subtly complemented by discrete embossed Triumph logos on the arms and back.

The other new cruiser-orientated riding jacket for 2009 is the classic cruiser styled Tbird. The Tbird features 1.2mm leather and comes with removable CE certified shoulder and elbow protectors. The aluminium vest liner can be removed in hot weather and large ventilation panels can be opened, while Triumph branding is kept to a minimum with subtle embossed logos on the back and arms. Like the H2Protec jacket and jeans, the Tbird jacket is available from Triumph dealers now.